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TECH CENTER 1600/2900

1638 page 1 of 1

#9

1600

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/554,024

DATE: 12/11/2001

TIME: 15:55:19

Input Set : A:\#356486 v1 - A33207-PCT-USA - Sequence Listing.txt

Output Set: N:\CRF3\12112001\I554024.raw

ENTERED

```
4 <110> APPLICANT: Freyssinet, Georges
5     Derose, Richard
6     Hoffman, Jules
8 <120> TITLE OF INVENTION: Gene Coding for Thanatin, Vector
9     Containing Same and Resulting Transformed Disease-Resistant
10    Plants
12 <130> FILE REFERENCE: A33207-PCT-USA
14 <140> CURRENT APPLICATION NUMBER: 09/554,024
15 <141> CURRENT FILING DATE: 2000-05-08
17 <150> PRIOR APPLICATION NUMBER: PCT/FR98/02375
18 <151> PRIOR FILING DATE: 1998-11-06
20 <150> PRIOR APPLICATION NUMBER: FR 97/14,263
21 <151> PRIOR FILING DATE: 1997-11-07
23 <160> NUMBER OF SEQ ID NOS: 14
25 <170> SOFTWARE: FastSEQ for Windows Version 3.0
27 <210> SEQ ID NO: 1
28 <211> LENGTH: 33
29 <212> TYPE: DNA
30 <213> ORGANISM: Psodius maculiventis
32 <220> FEATURE:
33 <221> NAME/KEY: CDS
34 <222> LOCATION: (1)...(33)
36 <400> SEQUENCE: 1
37   atc atc tac tgc aac agg agg act ggt aag tgc           33
38   ile ile tyr cys asn arg arg thr gly lys cys
39   1             5             10
42 <210> SEQ ID NO: 2
43 <211> LENGTH: 63
44 <212> TYPE: DNA
45 <213> ORGANISM: Artificial Sequence
47 <220> FEATURE:
48 <221> NAME/KEY: CDS
49 <222> LOCATION: (1)...(63)
51 <223> OTHER INFORMATION: Derived from Psodius maculiventis
53 <400> SEQUENCE: 2
54   ggt tcc aag aag cca gtg cca atc atc tac tgc aac agg agg act ggt           48
55   gly ser lys lys pro val pro ile ile tyr cys asn arg arg thr gly
56   1             5             10             15
58   aag tgc cag agg atg                                           63
59   lys cys gln arg met
60             20
63 <210> SEQ ID NO: 3
64 <211> LENGTH: 98
65 <212> TYPE: DNA
66 <213> ORGANISM: Artificial Sequence
68 <220> FEATURE:
69 <223> OTHER INFORMATION: Derived from Psodius maculiventis
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71 <221> NAME/KEY: CDS  
 72 <222> LOCATION: (1)...(63)  
 74 <400> SEQUENCE: 3  
 75 ggt tcc aag aag cca gtg cca atc atc tac tgc aac agg agg act ggt 48  
 76 Gly Ser Lys Lys Pro Val Pro Ile Ile Tyr Cys Asn Arg Arg Thr Gly  
 77 1 5 10 15  
 79 aag tgc cag agg atg tgagctcggc gaggcgaacg tgcgacgga tccgg 98  
 80 Lys Cys Gln Arg Met  
 81 20  
 84 <210> SEQ ID NO: 4  
 85 <211> LENGTH: 106  
 86 <212> TYPE: DNA  
 87 <213> ORGANISM: Artificial Sequence  
 89 <220> FEATURE:  
 90 <223> OTHER INFORMATION: Derived from Psodius maculiventis  
 92 <221> NAME/KEY: CDS  
 93 <222> LOCATION: (12)...(101)  
 95 <400> SEQUENCE: 4  
 96 gcgtcgacgc c atg ggt ttc gtg ctt ttc tct cag ctt cca tct ttc ctt 50  
 97 Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu  
 98 1 5 10  
 100 ctt gtg tct act ctt ctt ctt ttc ctt gtg atc tct cac tct tgc cgt 98  
 101 Leu Val Ser Thr Leu Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg  
 102 15 20 25  
 104 gcc ggcga 106  
 105 Ala  
 106 30  
 109 <210> SEQ ID NO: 5  
 110 <211> LENGTH: 197  
 111 <212> TYPE: DNA  
 112 <213> ORGANISM: Artificial Sequence  
 114 <220> FEATURE:  
 115 <223> OTHER INFORMATION: Derived from Psodius maculiventis  
 117 <221> NAME/KEY: CDS  
 118 <222> LOCATION: (12)...(164)  
 120 <400> SEQUENCE: 5  
 121 gcgtcgacgc c atg ggt ttc gtg ctt ttc tct cag ctt cca tct ttc ctt 50  
 122 Met Gly Phe Val Leu Phe Ser Gln Leu Pro Ser Phe Leu  
 123 1 5 10  
 125 ctt gtg tct act ctt ctt ctt ttc ctt gtg atc tct cac tct tgc cgt 98  
 126 Leu Val Ser Thr Leu Leu Leu Phe Leu Val Ile Ser His Ser Cys Arg  
 127 15 20 25  
 129 gcc ggt tcc aag aag cca gtg cca atc atc tac tgc aac agg agg act 146  
 130 Ala Gly Ser Lys Lys Pro Val Pro Ile Ile Tyr Cys Asn Arg Arg Thr  
 131 30 35 40 45  
 133 ggt aag tgc cag agg atg tgagctcggc gaggcgaacg tgcgacgga 194  
 134 Gly Lys Cys Gln Arg Met  
 135 50  
 137 tcc 197

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139 <210> SEQ ID NO: 6
140 <211> LENGTH: 75
141 <212> TYPE: DNA
142 <213> ORGANISM: Artificial Sequence
144 <220> FEATURE:
145 <223> OTHER INFORMATION: Synthetic oligonucleotide
147 <400> SEQUENCE: 6
148  gcgtcgacgc gatgggtttc gtgcttttct ctcagcttcc atctttcctt cttgtgtcta      60
149  ctcttcttct ttccc                                     75
151 <210> SEQ ID NO: 7
152 <211> LENGTH: 72
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial Sequence
156 <220> FEATURE:
157 <223> OTHER INFORMATION: Synthetic oligonucleotide
159 <400> SEQUENCE: 7
160  tcgccggcac ggcaagagta agagatcaca aggaaaagaa gaagagtaga cacaagaagg      60
161  aaagatggaa gc                                         72
163 <210> SEQ ID NO: 8
164 <211> LENGTH: 42
165 <212> TYPE: DNA
166 <213> ORGANISM: Artificial Sequence
168 <220> FEATURE:
169 <223> OTHER INFORMATION: Synthetic oligonucleotide
171 <400> SEQUENCE: 8
172  ggtccaaga agccagtgcc aatcatctac tgcaacagga cg                               42
174 <210> SEQ ID NO: 9
175 <211> LENGTH: 87
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Synthetic oligonucleotide
182 <400> SEQUENCE: 9
183  ccggatccgt cgacacgttc gcctcgccga gtcacatcc tctggcactt accagtcctc      60
184  ctgttgagct agatgattgg cactggc                                     87
186 <210> SEQ ID NO: 10
187 <211> LENGTH: 85
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Synthetic oligonucleotide
194 <400> SEQUENCE: 10
195  agggccccct agggttttaa cggccagtca ggccgaattc gagctcggta cccggggatc      60
196  ctctagagtc gacctgcagg catgc                                         85
198 <210> SEQ ID NO: 11
199 <211> LENGTH: 66
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:

```

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204 <223> OTHER INFORMATION: Synthetic oligonucleotide
206 <400> SEQUENCE: 11
207 ccctgaacca ggctcgaggg cgcgcccttaa ttaaaagctt gcatgcctgc aggtcgactc      60
208 tagagg                                                                66
210 <210> SEQ ID NO: 12
211 <211> LENGTH: 93
212 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Synthetic oligonucleotide
218 <400> SEQUENCE: 12
219 ccggccagtc aggccacact taattaagtt taaacgcggc cccggcgcg ctaggtgtgt      60
220 gctcgagggc ccaacctcag tacctggttc agg                                93
222 <210> SEQ ID NO: 13
223 <211> LENGTH: 93
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Synthetic oligonucleotide
230 <400> SEQUENCE: 13
231 ccggcctgaa ccaggtactg aggttgggcc ctgcagcaca cacctaggcg cgccggggcc      60
232 gcgtttaaac ttaattaagt gtggcctgac tgg                                93
234 <210> SEQ ID NO: 14
235 <211> LENGTH: 13
236 <212> TYPE: PRT
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Derived from thanatin
242 <221> NAME/KEY: VARIANT
243 <222> LOCATION: (1)...(1)
244 <223> OTHER INFORMATION: Variable residue
246 <221> NAME/KEY: VARIANT
247 <222> LOCATION: (13)...(13)
248 <223> OTHER INFORMATION: Variable residue
250 <400> SEQUENCE: 14
W--> 251 Xaa Ile Ile Tyr Cys Asn Arg Arg Thr Gly Lys Cys Xaa
      252 1          5          10
259 NY02:356486.1

```

## VERIFICATION SUMMARY

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Input Set : A:\#356486 v1 - A33207-PCT-USA - Sequence Listing.txt  
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L:251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14